

Xiao-Guang Xu

List of Publications by Year in descending order

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papers

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394286

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32
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all docs

110
docs citations

110
times ranked

2153
citing authors

#	ARTICLE	IF	CITATIONS
1	Unconventional Chargeâ€“Spin Conversion in Weylâ€“Semimetal WTe_2 . Advanced Materials, 2020, 32, e2000818.	11.1	83
2	Observation of charge to spin conversion in Weyl semimetal WTe_2 at room temperature. Physical Review Research, 2020, 2, .	11.3	78
3	Intrinsic room temperature ferromagnetism in boron-doped ZnO. Applied Physics Letters, 2010, 97, .	1.5	66
4	Fe@Ag coreâ€“shell nanoparticles with both sensitive plasmonic properties and tunable magnetism. Materials Letters, 2010, 64, 1732-1734.	1.3	51
5	Effect of oxide/oxide interface on polarity dependent resistive switching behavior in ZnO/ZrO ₂ heterostructures. Applied Physics Letters, 2014, 104, .	1.5	49
6	Spin Hall magnetoresistance in an antiferromagnetic magnetoelectric Cr ₂ O ₃ /heavy-metal W heterostructure. Applied Physics Letters, 2017, 110, .	1.5	47
7	Strain-mediated electric-field control of exchange bias in a Co ₉₀ Fe ₁₀ /BiFeO ₃ /SrRuO ₃ /PMN-PT heterostructure. Scientific Reports, 2015, 5, 8905.	1.6	46
8	Negative spin Hall magnetoresistance in antiferromagnetic Cr ₂ O ₃ /Ta bilayer at low temperature region. Applied Physics Letters, 2018, 112, .	1.5	45
9	Co Nanoparticles Induced Resistive Switching and Magnetism for the Electrochemically Deposited Polypyrrole Composite Films. ACS Applied Materials & Interfaces, 2014, 6, 17823-17830.	4.0	42
10	Ionized-oxygen vacancies related dielectric relaxation in heteroepitaxial K _{0.5} Na _{0.5} NbO ₃ /La _{0.67} Sr _{0.33} MnO ₃ structure at elevated temperature. Applied Physics Letters, 2009, 95, .	1.5	40
11	Perpendicular Magnetic Anisotropy of Full-Heusler Films in Pt/Co ₂ FeAl/MgO Trilayers. Applied Physics Express, 2011, 4, 043006.	1.1	38
12	Anomalous Hall effect and spin-orbit torques in MnGa/IrMn films: Modification from strong spin Hall effect of the antiferromagnet. Physical Review B, 2016, 94, .	1.1	35
13	Fe ₃ O ₄ @Astragalus Polysaccharide Coreâ€“Shell Nanoparticles for Iron Deficiency Anemia Therapy and Magnetic Resonance Imaging in Vivo. ACS Applied Materials & Interfaces, 2019, 11, 10452-10461.	4.0	35
14	Modulated switching current density and spin-orbit torques in MnGa/Ta films with inserting ferromagnetic layers. Scientific Reports, 2016, 6, 38375.	1.6	30
15	$Mn_{1.5}Ga_2$		
16	Monodisperse magnetic metallic nanoparticles: synthesis, performance enhancement, and advanced applications. Rare Metals, 2013, 32, 323-331.	3.6	25
17	Low-energy Resistive Random Access Memory Devices with No Need for a Compliance Current. Scientific Reports, 2015, 5, 10409.	1.6	25
18	Ultra-thin BiFeO ₃ nanowires prepared by a solâ€“gel combustion method: an investigation of its multiferroic and optical properties. Journal of Materials Science: Materials in Electronics, 2012, 23, 180-184.	1.1	21

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19	Enhanced fatigue and ferroelectric properties in multiferroic (Ba _{0.7} Sr _{0.3})TiO ₃ /(Bi _{1.05} La _{0.05})FeO ₃ epitaxial heterostructures. Applied Physics Letters, 2013, 102, .	1.5	19
20	Enhanced spin-orbit torques in MnAl/Ta films with improving chemical ordering. Applied Physics Letters, 2017, 110, .	1.5	19
21	Robust emergence of a topological Hall effect in MnGa/heavy metal bilayers. Physical Review B, 2018, 97, .	1.1	19
22	Electronic structures of Heusler alloy Co ₂ FeAl _{1-x} Si _x surface. Rare Metals, 2012, 31, 107-111.	3.6	17
23	Magnetically recoverable Ag/Bi ₂ Fe ₄ O ₉ nanoparticles as a visible-light-driven photocatalyst. Chemical Physics Letters, 2019, 715, 129-133.	1.2	17
24	Spin-orbit torque-induced multiple magnetization switching behaviors in synthetic antiferromagnets. Applied Physics Letters, 2020, 117, .	1.5	17
25	Enhancement of Magnetic Properties for FePt Nanoparticles by Rapid Annealing in a Vacuum. Journal of Physical Chemistry C, 2009, 113, 19867-19870.	1.5	16
26	Unusual anomalous Hall effect in perpendicularly magnetized YIG films with a small Gilbert damping constant. Physical Review B, 2020, 101, .	1.1	16
27	Effect of defect complex on magnetic properties of (Fe, Mn)-doped ZnO thin films. Rare Metals, 2012, 31, 154-157.	3.6	15
28	The Anomalous Hall Effect of Co ₂ FeAl _{0.5} Si _{0.5} /Pt Multilayers with Perpendicular Magnetic Anisotropy. Applied Physics Express, 2013, 6, 113003.	1.1	15
29	Perpendicular magnetic anisotropy and thermal stability in Co ₂ FeAl _{0.5} Si _{0.5} /Pt multilayers. Applied Physics A: Materials Science and Processing, 2014, 117, 773-779.	1.1	15
30	Perpendicular magnetic anisotropy of Pt/Co ₂ FeAl _{0.5} Si _{0.5} /MgAl ₂ O ₄ trilayers. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2780-2784.	0.8	15
31	Disorder dependent spin-orbit torques in L10 FePt single layer. Applied Physics Letters, 2020, 117, 242403.	1.5	15
32	Perpendicularizing magnetic anisotropy of full-Heusler Co ₂ FeAl films by cosputtering with terbium. Applied Physics Letters, 2010, 96, 142505.	1.5	14
33	Perpendicular Magnetic Anisotropy in Co-Based Full Heusler Alloy Thin Films. Spin, 2015, 05, 1540012.	0.6	14
34	Enhanced and Facet-specific Electrocatalytic Properties of Ag/Bi ₂ Fe ₄ O ₉ Composite Nanoparticles. ACS Applied Materials & Interfaces, 2018, 10, 12698-12707.	4.0	14
35	Facile synthesis of ultrasmall MnFe ₂ O ₄ nanoparticles with high saturation magnetization for magnetic resonance imaging. Ceramics International, 2021, 47, 34005-34011.	2.3	14
36	Simultaneous laser excitation of backward volume and perpendicular standing spin waves in full-Heusler Co ₂ FeAl _{0.5} Si _{0.5} films. Scientific Reports, 2017, 7, 42513.	1.6	13

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37	Architecting Braided Porous Carbon Fibers Based on High-Density Catalytic Crystal Planes to Achieve Highly Reversible Sodium-Ion Storage. <i>Advanced Science</i> , 2022, 9, e2104780.	5.6	13
38	Synthetic antiferromagnet with Heusler alloy Co_2FeAl ferromagnetic layers. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	12
39	A first-principles study of the magnetic properties in boron-doped ZnO. <i>Chinese Physics B</i> , 2012, 21, 047504.	0.7	12
40	Dependence of ferromagnetic properties on growth oxygen partial pressure in boron-doped ZnO thin films. <i>Journal of Materials Science</i> , 2012, 47, 6513-6516.	1.7	12
41	Effects of dopants on magnetic properties of Cu-doped ZnO thin films. <i>Journal of Materials Science</i> , 2012, 47, 530-533.	1.7	12
42	Electrically controlled spin-switch and evolution of Hanle spin precession in graphene. <i>2D Materials</i> , 2019, 6, 035042.	2.0	12
43	Spin Logical and Memory Device Based on the Nonvolatile Ferroelectric Control of the Perpendicular Magnetic Anisotropy in $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3/\text{Co}/\text{Pt}$ Heterostructure. <i>Advanced Electronic Materials</i> , 2020, 6, 2000102.	2.6	12
44	Preparation Fe_3O_4 @chitosan-graphene quantum dots nanocomposites for fluorescence and magnetic resonance imaging. <i>Chemical Physics Letters</i> , 2021, 783, 139060.	1.2	12
45	Effect of annealing atmosphere on magnetic properties of pure ZnO and Na: ZnO films. <i>Rare Metals</i> , 2012, 31, 27-30.	3.6	11
46	In-plane electric field controlled ferromagnetism and anisotropic magnetoresistance in an LSMO/PMN-PT heterostructure. <i>Nanotechnology</i> , 2018, 29, 224003.	1.3	11
47	Fe_3O_4 @ <i>Angelica sinensis</i> polysaccharide nanoparticles as an ultralow-toxicity contrast agent for magnetic resonance imaging. <i>Rare Metals</i> , 2021, 40, 2486-2493.	3.6	11
48	Electronic structures of new tunnel barrier spinel MgAl_2O_4 : first-principles calculations. <i>Rare Metals</i> , 2012, 31, 112-116.	3.6	10
49	Effects of annealing and MgO thickness on perpendicular magnetic anisotropy in $\text{Pt}/\text{Co}_2\text{FeAl}/\text{MgO}/\text{Pt}$ multilayers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 606-610.	3.8	10
50	A novel multiferroic/full-heusler $\text{BiFeO}_3/\text{Co}_2\text{FeAl}_{0.5}\text{Si}_{0.5}$ heterostructure: Structural, ferroelectric and magnetic properties. <i>Journal of Alloys and Compounds</i> , 2016, 660, 125-130.	2.8	10
51	Self-rectifying and forming-free resistive switching behaviors in $\text{Pt}/\text{La}_2\text{Ti}_2\text{O}_7/\text{Pt}$ structure. <i>Ceramics International</i> , 2022, 48, 4693-4698.	2.3	10
52	Strain-controlled giant magnetoresistance of a spin valve grown on a flexible substrate. <i>RSC Advances</i> , 2016, 6, 88090-88095.	1.7	9
53	Interface-driven unusual anomalous Hall effect in $\text{Mn}/\text{MgO}/\text{Pt}/\text{Mn}$ bilayers. <i>Physical Review B</i> , 2019, 100, .	1.1	9
54	Strong perpendicular magnetic anisotropy in $\text{Co}_2\text{FeAl}_{0.5}\text{Si}_{0.5}$ film sandwiched by MgO layers. <i>Chinese Physics B</i> , 2013, 22, 057305.	0.7	8

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55	Ultra-large non-volatile modulation of magnetic moments in PbZr _{0.2} Ti _{0.8} O ₃ /MgO/La _{0.7} Sr _{0.3} MnO ₃ heterostructure at room temperature via interfacial polarization mediation. <i>Scientific Reports</i> , 2017, 7, 2627.	1.6	8
56	The effects of Zn vacancies on ferromagnetism in Cu-doped ZnO films controlled by oxygen pressure and Li doping. <i>Chinese Physics B</i> , 2013, 22, 067503.	0.7	7
57	The effects of tungsten concentration on crystalline structure and perpendicular magnetic anisotropy of Co-W films. <i>AIP Advances</i> , 2014, 4, 127156.	0.6	7
58	Spin orbit interaction fingerprints of a ballistic graphene Josephson junction. <i>Carbon</i> , 2017, 122, 150-161.	5.4	7
59	Large modulation of perpendicular magnetic anisotropy in a BiFeO ₃ /Al ₂ O ₃ /Pt/Co/Pt multiferroic heterostructure via spontaneous polarizations. <i>Applied Physics Letters</i> , 2018, 113, 062401.	1.5	7
60	Perpendicular magnetic anisotropy in SrTiO ₃ /Co/Pt films induced by oxygen diffusion from CaTiO ₃ spacer layer. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	7
61	Lateral Electric Field Controlled Perpendicular Magnetic Anisotropy and Current Induced Magnetization Switching in Multiferroic Heterostructures. <i>Advanced Electronic Materials</i> , 2020, 6, 2000229.	2.6	7
62	Butterfly-shaped multiferroic BiFeO ₃ @BaTiO ₃ core-shell nanotubes: the interesting structural, multiferroic, and optical properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 1439-1445.	1.1	6
63	Enhanced ferroelectric and UV photocatalytic properties in a Bi ₄ Ti ₃ O ₁₂ @ZnO core-shelled nanostructure. <i>Journal of Materials Science: Materials in Electronics</i> , 2014, 25, 1423-1428.	1.1	6
64	Hybrid magnetoresistance in Pt-based multilayers: Effect originated from strong interfacial spin-orbit coupling. <i>Scientific Reports</i> , 2016, 6, 20522.	1.6	6
65	Effect of Ti doping on spin injection and relaxation in few-layer graphene. <i>Carbon</i> , 2018, 127, 568-575.	5.4	6
66	Highly stable aqueous phase black phosphorus quantum dots with enhanced fluorescence property. <i>Journal of Materials Science and Technology</i> , 2022, 116, 50-57.	5.6	6
67	Room temperature ferromagnetism of boron-doped ZnO nanoparticles prepared by solvothermal method. <i>Rare Metals</i> , 2013, 32, 264-268.	3.6	5
68	Magneto-optical Kerr effect in L1 FePdPt ternary alloys: Experiments and first-principles calculations. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	5
69	Enhanced electrical and ferroelectric properties in a multiferroic (BiFeO ₃ /Bi _{0.5} Na _{0.5} TiO ₃) ₃ /LaNiO ₃ superlattices structure. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 114, 367-372.	1.1	5
70	Improved electrical and ferroelectric properties of multiferroic Na _{0.5} Bi _{0.5} TiO ₃ /Bi _{1.07} Nd _{0.03} FeO ₃ /Na _{0.5} Bi _{0.5} TiO ₃ sandwiched structure by a sol-gel process. <i>Journal of Materials Science: Materials in Electronics</i> , 2014, 25, 2411-2415.	1.1	5
71	A proposed experimental diagnosing of specular Andreev reflection using the spin orbit interaction. <i>Scientific Reports</i> , 2016, 6, 29279.	1.6	5
72	Polarization modulation resistive switching in a lead-free ferroelectric Pt/Bi _{0.5} Na _{0.5} TiO ₃ /La _{0.67} Sr _{0.33} MnO ₃ sandwiched heterostructure. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 12816-12822.	1.1	5

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73	Growth Modulation of Superlattice Tetragonal PbTiO ₃ Thin Films with Self-Assembled Nanocolumn Structures. <i>Advanced Electronic Materials</i> , 2021, 7, 2100547.	2.6	5
74	Enhanced magnetic properties of cobalt nanoparticles on FeMn films. <i>Materials Letters</i> , 2010, 64, 2424-2426.	1.3	4
75	Room Temperature Ferromagnetism in Lithium-Doped ZnO. <i>IEEE Transactions on Magnetics</i> , 2012, 48, 3422-3425.	1.2	4
76	A clear oscillation of the interlayer exchange coupling in Co ₂ FeAl/Cr/Co ₂ FeAl structure with MgO capping layer. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	4
77	Magnetic properties of corrosion-resistant CoW films. <i>RSC Advances</i> , 2014, 4, 26508-26515.	1.7	4
78	Exchange bias on polycrystalline BiFeO ₃ /Co ₂ Fe(Al _{0.5} Si _{0.5}) heterostructures. <i>Rare Metals</i> , 2017, 36, 32-36.	3.6	4
79	Self-Assembled Hexagonal Lu _{1-x} In _x /FeO ₃ Nanopillars Embedded in Orthorhombic Lu _{1-x} In _x /FeO ₃ Nanoparticle Matrixes as Room-Temperature Multiferroic Thin Films for Memory Devices and Spintronic Applications. <i>ACS Applied Nano Materials</i> , 2020, 3, 7516-7523.	2.4	4
80	Enhancement of Interfacial Polarization in BaTiO ₃ Thin Films via Oxygen Inhomogeneity. <i>Advanced Electronic Materials</i> , 0, , 2100876.	2.6	4
81	ENHANCED MULTIFERROIC PROPERTIES OF BiFeO ₃ CERAMICS BY Mo DOPING. <i>Modern Physics Letters B</i> , 2011, 25, 1521-1528.	1.0	3
82	Room-temperature spin transport in InAs nanowire lateral spin valve. <i>RSC Advances</i> , 2016, 6, 75736-75740.	1.7	3
83	Heteroepitaxial Pb _{0.9} Sr _{0.1} TiO ₃ /Bi _{0.9} La _{0.1} FeO ₃ /Pb _{0.9} Sr _{0.1} TiO ₃ multiferroic structure: an effective way to improve the electrical, ferroelectric and magnetic performance. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 8080-8086.	1.1	3
84	Robust spin-orbit torques in ferromagnetic multilayers with weak bulk spin Hall effect. <i>Applied Physics Letters</i> , 2020, 117, 122401.	1.5	3
85	The influence of perpendicular exchange bias on current-induced magnetization switching. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 475001.	1.3	3
86	Formation of magnetic anionic electrons by hole doping. <i>Journal of Materials Chemistry C</i> , 2022, 10, 7674-7679.	2.7	3
87	Lithium incorporation enhanced resistive switching behaviors in lithium lanthanum titanium oxide-based heterostructure. <i>Journal of Materials Science and Technology</i> , 2022, 128, 142-147.	5.6	3
88	Interfacial and Magnetic Properties of Pt/Co ₂ /FeAl _{0.5} /Si _{0.5} /MgO Multilayers With Perpendicular Magnetic Anisotropy. <i>IEEE Transactions on Magnetics</i> , 2014, 50, 1-4.	1.2	2
89	Aging effect of spin accumulation in non-local spin valves. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 432, 291-295.	1.0	2
90	Strain-Controlled Giant Magnetoresistance in Spin Valves Grown on Shape Memory Alloys. <i>ACS Applied Electronic Materials</i> , 2019, 1, 910-918.	2.0	2

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91	Geometric size dependence of spin-mixing conductance at Pt/YIG interface. Applied Physics Letters, 2021, 118, .	1.5	2
92	The Structural, Magnetic, and Transport Properties of the Pulsed Laser-Deposited $\text{Co}_{2-x}\text{FeAl}$ Thin Films. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	0.8	2
93	Current-induced domain wall motion in magnetic nanowires with different dimensions. Science China: Physics, Mechanics and Astronomy, 2012, 55, 2030-2032.	2.0	1
94	Room temperature ferromagnetism of Si-doped ZnO thin films prepared by sol-gel method. Rare Metals, 2013, 32, 165-168.	3.6	1
95	INTRINSIC ROOM TEMPERATURE FERROMAGNETISM OF SILICON-DOPED ZnO THIN FILMS. Modern Physics Letters B, 2013, 27, 1350092.	1.0	1
96	Electric-Field-Controlled Room Temperature AMR Switching in a $\text{NiFe/BiFeO}_3/\text{SrRuO}_3/\text{SrTiO}_3$ (111) Heterostructure. IEEE Transactions on Magnetics, 2015, 51, 1-3.	1.2	1
97	Tuning Effective Spin Hall Angles via Oxygen Vacancies in Multiferroic BiFeO_3 -Based Heterostructures. Advanced Electronic Materials, 2019, 5, 1900435.	2.6	1
98	Influence of thickness on current-induced magnetization switching in L1_0 -FePt single layer*. Chinese Physics B, 2021, 30, 107101.	0.7	1
99	Interface-driven electrical magnetochiral anisotropy in Pt/PtMnGa bilayers. Applied Physics Letters, 2021, 118, 252403.	1.5	1
100	Room temperature spin Hall magnetoresistance at a hetero-interface between multiferroic $\text{Bi}_{1.05}\text{La}_{0.05}\text{FeO}_3$ and heavy-metal Pt. Applied Physics Letters, 2022, 120, 062406.	1.5	1
101	Room-temperature Non-Local Spin Transport in Few-Layer Black Phosphorus Passivated with MgO. Advanced Electronic Materials, 0, , 2101048.	2.6	1
102	Frequency regulation in alternating current transportation properties for electron correlated rare-earth nickelates heterostructures. Journal of Applied Physics, 2022, 131, 075109.	1.1	1
103	Low-temperature quantum correction to anisotropic magnetoresistance in $\text{TiMn}_3\text{O}_{12}/\text{Pt}$ heterostructures. Physical Review B, 2022, 105, .		
104	Robust interface-induced unusual anomalous Hall effect in $\text{Mn}_3\text{Sn}/\text{Pt}$ bilayers. Rare Metals, 2022, 41, 3012-3018.	3.6	1
105	Enhanced Electric and Magnetic Properties of the Epitaxial $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{TiO}_3/\text{BiFeO}_3$ Multiferroic Heterostructure. IEEE Transactions on Magnetics, 2012, 48, 3418-3421.	1.2	0
106	BALLISTIC ELECTRON TRANSPORT IN A HYBRID FERROMAGNET/TWO-DIMENSIONAL ELECTRON GAS NANOSTRUCTURE. Modern Physics Letters B, 2012, 26, 1250191.	1.0	0
107	First-principles calculations on magnetic property of Cu-doped ZnO tuned by Na and Al dopants. Rare Metals, 2015, 34, 40-44.	3.6	0
108	Probing the Interlayer Exchange Coupling in Polycrystalline $\text{Co}_{2-x}\text{FeAl}/\text{Cr}/\text{Co}_{2-x}\text{FeAl}$ Multilayers on Different Substrates. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100867.	0.8	0

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109	Enhanced second harmonic Hall resistance in in-plane synthetic antiferromagnets. Applied Physics Letters, 2022, 120, 252404.	1.5	0